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Health control plan

Ensuring your workers and contractors are ‘fit for duty’

Small Mines Roadshow

February / March / April 2025

What should your health control plan contain?

- List the health hazards present at the mine
- Include outcomes of risk assessments for each hazard
- Specify the controls for each health hazard
- Outline arrangements for personal exposure monitoring including frequency

Health control plan contents cont.

Specify	specify other actions to verify the effectiveness and implementation of controls e.g. maintenance records for vehicles and equipment, roadway maintenance and inspection, fit testing for personal protective equipment
Outline	outline arrangements for health monitoring for specified hazards e.g. coal, silica, diesel exhaust emission
Specify	specify performance measures and auditing methods, including frequency and results

Health hazard risk assessment

STEP 1 – Identify health hazards (HH) and their source(s)

STEP 2 – What workers/groups of workers are most at risk? similar exposure groups (SEGs)

STEP 3 – What areas and tasks give rise to health hazards?

STEP 4 – Review work areas

STEP 5 – Analyse, assess and rank risk

STEP 6 – Identify, review and assess current controls

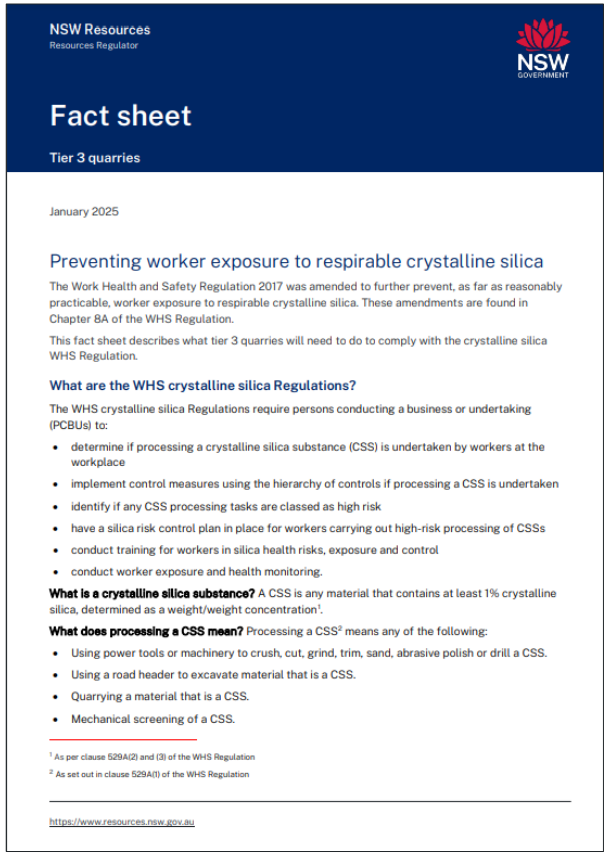
	Insignificant 1	Minor 2	Significant 3	Major 4	Severe 5
5 Almost Certain	Medium 5	High 10	Very High 15	Extreme 20	Extreme 25
4 Likely	Medium 4	Medium 8	High 12	Very High 16	Extreme 20
3 Moderate	Low 3	Medium 6	Medium 9	High 12	Very High 15
2 Unlikely	Very low 2	Low 4	Medium 6	Medium 8	High 10
1 Rare	Very low 1	Very low 2	Low 3	Medium 4	Medium 5

https://www.resources.nsw.gov.au/sites/default/files/documents/pub18-37-identifying-and-assessing-health-hazards.pdf

Preventing worker exposure to respirable crystalline silica

Key obligations for quarry operators

- Identify crystalline silica substances (CSS) i.e. determine whether quarry materials contain over 1% crystalline silica
- Implement control measures
- Develop a silica risk control plan
- Provide training to workers
- Conduct health monitoring
- Monitor dust exposure



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Fact sheet

Tier 3 quarries

January 2025

Preventing worker exposure to respirable crystalline silica

The Work Health and Safety Regulation 2017 was amended to further prevent, as far as reasonably practicable, worker exposure to respirable crystalline silica. These amendments are found in Chapter 8A of the WHS Regulation.

This fact sheet describes what tier 3 quarries will need to do to comply with the crystalline silica WHS Regulation.

What are the WHS crystalline silica Regulations?

The WHS crystalline silica Regulations require persons conducting a business or undertaking (PCBUs) to:

- determine if processing a crystalline silica substance (CSS) is undertaken by workers at the workplace
- implement control measures using the hierarchy of controls if processing a CSS is undertaken
- identify if any CSS processing tasks are classed as high risk
- have a silica risk control plan in place for workers carrying out high-risk processing of CSSs
- conduct training for workers in silica health risks, exposure and control
- conduct worker exposure and health monitoring.

What is a crystalline silica substance? A CSS is any material that contains at least 1% crystalline silica, determined as a weight/weight concentration[1].

What does processing a CSS mean? Processing a CSS[2] means any of the following:

- Using power tools or machinery to crush, cut, grind, trim, sand, abrasive polish or drill a CSS.
- Using a road header to excavate material that is a CSS.
- Quarrying a material that is a CSS.
- Mechanical screening of a CSS.

[1] As per clause 529A(2) and (3) of the WHS Regulation

[2] As set out in clause 529A(1) of the WHS Regulation

https://www.resources.nsw.gov.au

Dust exposure

- Identify the chemical composition of the material being processed
- Conduct personal dust exposure monitoring on each SEGs-5 workers
- Review and maintain controls to ensure workers aren't exposed to hazardous dust
- Ensure workers (incl contractors) are trained in dust controls

Noise

Work **Health** & Safety Regulation 2017 clause 58 - Audiometric Testing

Commenced on 1 January 2024

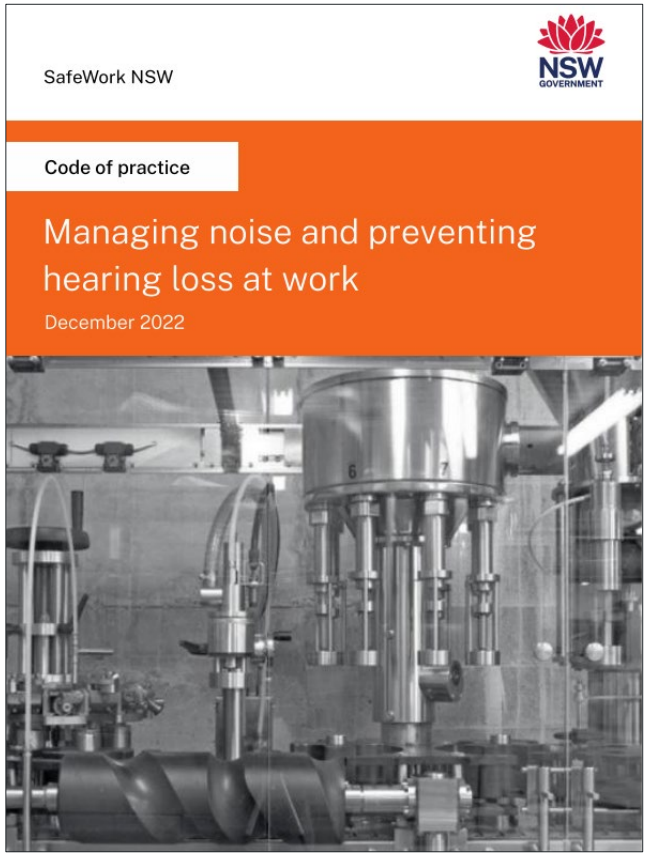
- If you employ workers who **frequently use hearing protection** to control noise that exceeds the exposure standard for noise, you will need to provide your workers with regular hearing tests.
- **Baseline hearing test** for new workers to be completed with **3 months** of commencement.
- **Monitoring hearing test at least every two years** during their employment.
- **More frequent hearing tests** may be required for workers exposed to high, average noise levels throughout their work shift (**e.g. ≥ 100dB(A)**).
- Record keeping: all reports must be confidential. Workers must receive a copy of reports.

Code of practice

This code provides guidance on how to manage the risks associated with hazardous noise in the workplace using the following systematic process

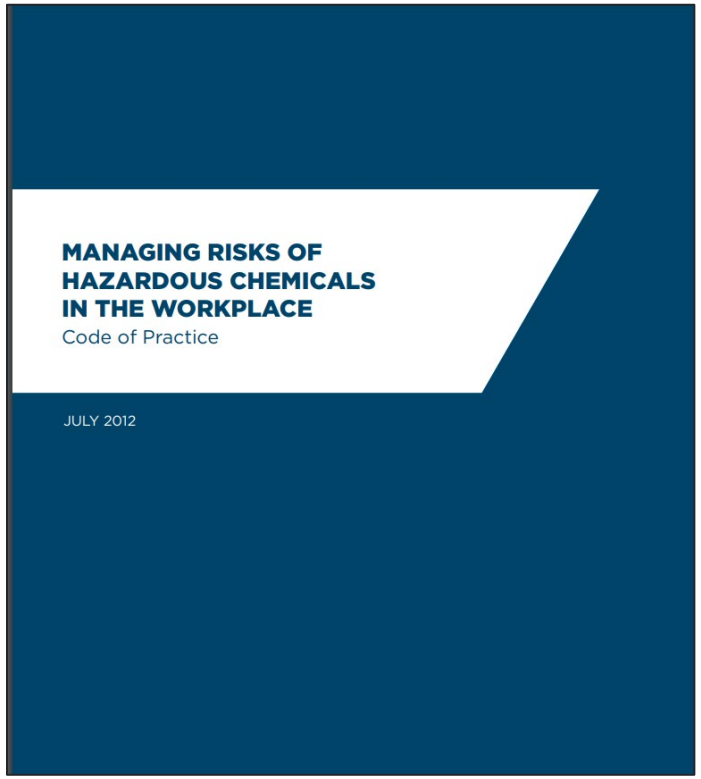
1. Identify hazards
2. Assess risks
3. Eliminate risks as far as is reasonably practicable
4. Control risks
5. Review control measures

[Code of practice for managing noise and preventing hearing loss at work]



Hazardous substances

- Chemical risk assessment – refer to safety data sheet.
- Can the chemical be substituted with a less hazardous product.
- Baseline monitoring should be completed by occupational hygienist for high or extreme risk chemicals.
- Maintain a hazardous substance register.
- Ensure appropriate first aid and firefighting equipment are available.
- Train workers in handling, storage and use.
- Health monitoring of workers – WHS Reg 17 Sch 14.



Contaminants – airborne or otherwise

Fibres

Solid particles where the length is longer than the width.

Fumes

Airborne solid particles condensed from a vaporous state.

Mists

Airborne droplets of substance.

Smoke

Particles generated from incomplete combustion of fuel.

Vapour

Molecular dispersion of material, normally liquid at ambient temperature.

Gas

Molecular dispersion of material, which boils below ambient temperature.

Diesel particulate matter/exhaust

Particles generated from diesel fuel and exhausts.

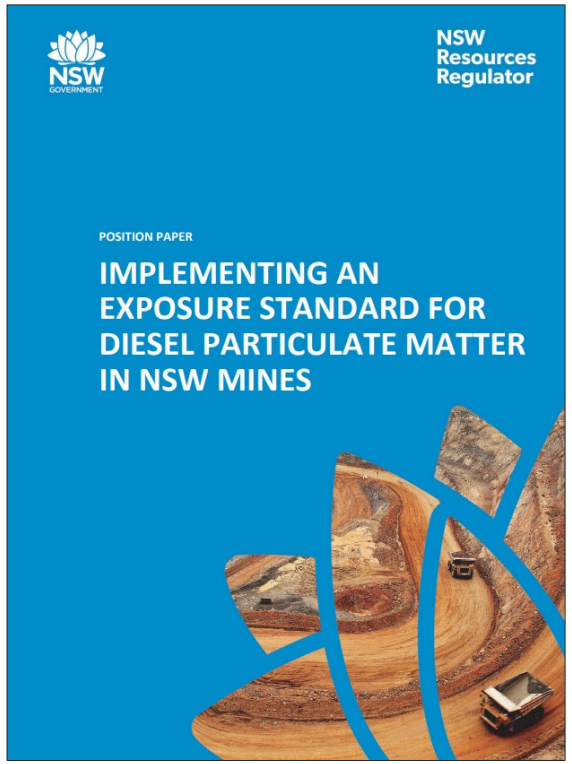
Diesel particulate matter

Section 42 of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2022 stipulates the requirement for personal exposure monitoring of workers to diesel particulate matter.

Where a mine operator has identified a risk of worker exposure to diesel particulate, they should undertake personal exposure monitoring of workers.

Mine operators should adopt risk-based approaches to the personal exposure monitoring strategy.

Mine operators should collect samples in accordance with relevant Australian Standards and recognised methodologies under the direction of a suitably competent occupational hygienist, independent to the mine.



Psychosocial hazards

- Review the Code of practice for Managing psychosocial hazards at work
- Consulted with workers
- Conducted a risk assessment
- Trained workers in psychosocial risks and controls applicable to the site
- Promote use of organisations (Lifeline/Beyond Blue) or engage an employee assistance program provider
- Establish incident reporting and investigation procedures

What are psychosocial hazards?

The Work Health and Safety Regulation 2017 identifies a psychosocial hazard as one that arises from, or relates to:

- the design or management of work, or
- work environment, or
- plant (equipment) at a workplace, or
- workplace interactions and behaviour, and
- may cause psychological harm, regardless of whether is also causes physical harm.

Ultraviolet (UV) radiation

Exposure to UV radiation from the sun is a known cause of skin cancer.

Controls

- Provide indoor shaded facilities for rest breaks
- Window tinting on mobile plant
- Appropriate clothing
- UV radiation exposure
- Rotate outdoor workers to reduce exposure

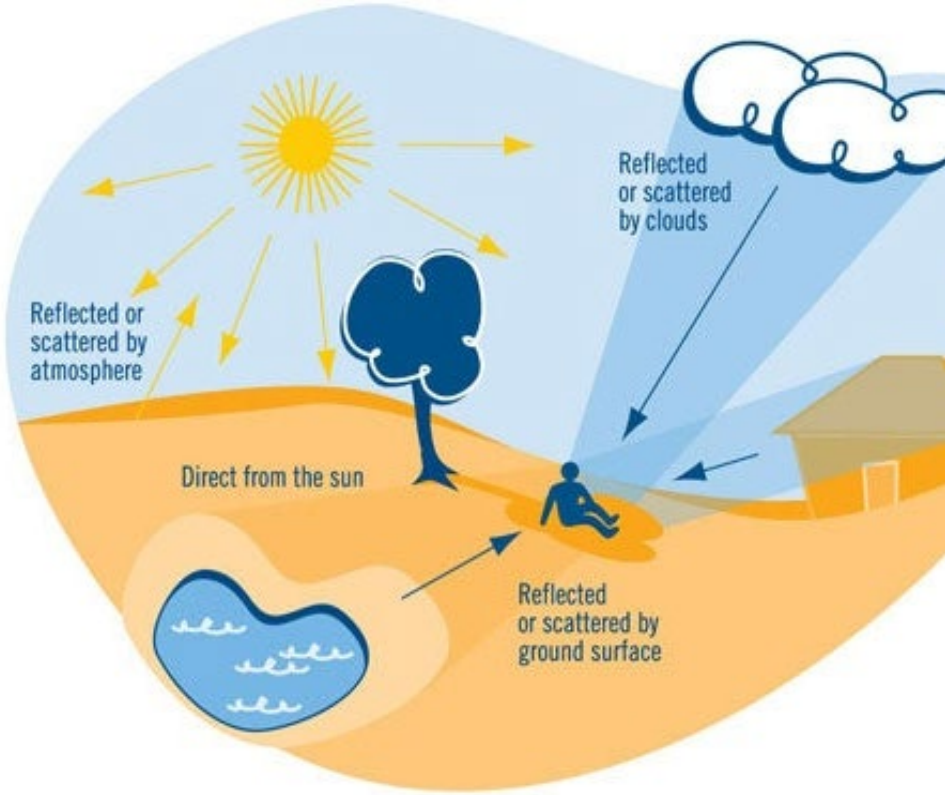
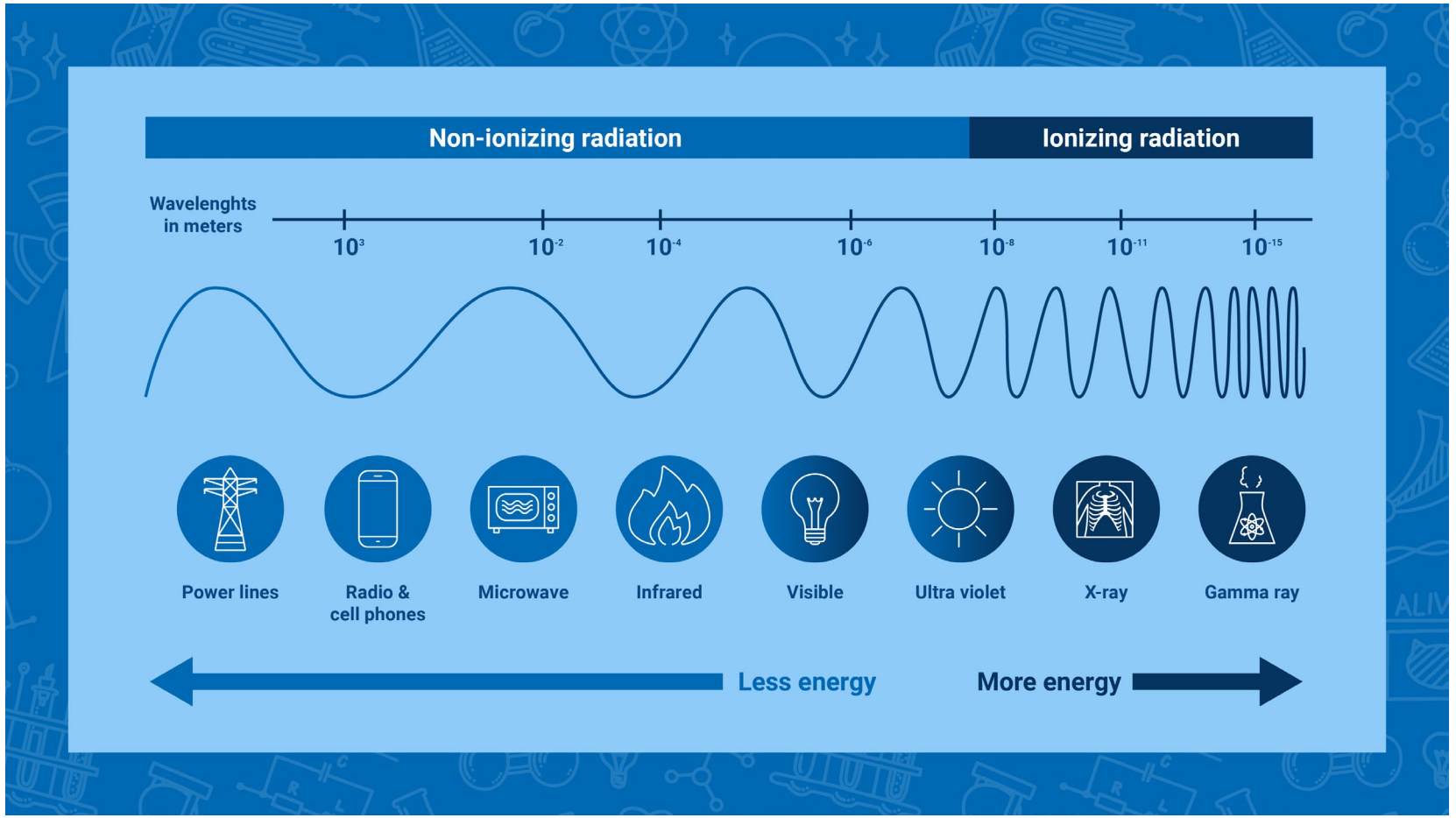


Figure 1. Direct and diffuse solar UVR. Illustration by Ography, courtesy of Cancer Council Victoria

Non-ionising radiation and ionising radiation



Non-ionising radiation

- A magnetic field non-destructive testing device
- An induction heater or induction furnace
- An industrial radiofrequency heater or welder
- A radiofrequency plasma tube
- Microwave or radiofrequency diathermy equipment
- An industrial microwave or radiofrequency processing system
- An optical source, emitting ultraviolet radiation, infrared or visible light
- A laser product with an accessible emission level more than the limit of a Class 3R laser product
- An optical fibre communication system exceeding Hazard Level 3R

Vibration

To manage the risks to health and safety, the PCBU should check the:

- level of vibration
- workers' frequency and duration of exposure
- design and layout of plant and vehicles.

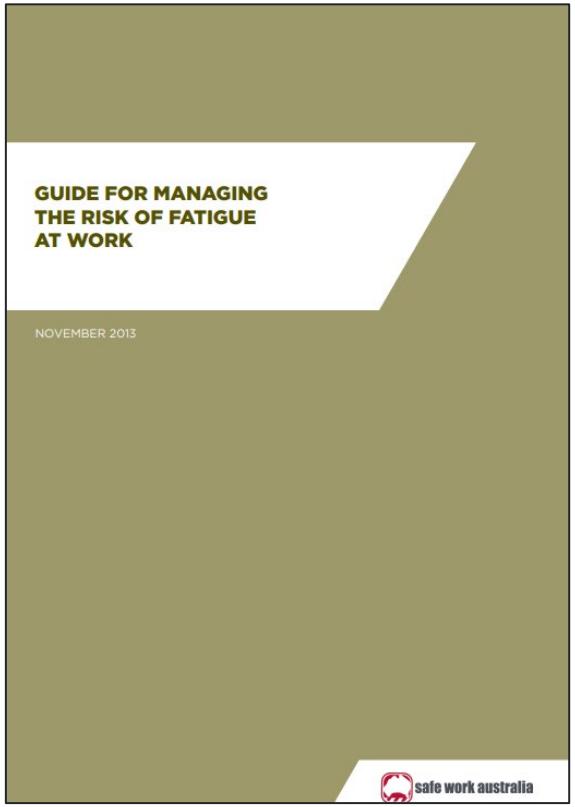
Hand-arm vibration (HAV) is a common hazard for construction, manufacturing and agricultural workers who use hand-held power tools and hand-guided machinery.

Whole body vibration (WBV) is vibration transferred to the human body through a supported surface or through the feet.

Drivers, operators or passengers in vehicles and machines travelling over uneven or unsealed surfaces might experience WBV. Standing on a platform attached to concrete crushing plant might also cause exposure.

Fatigue management

- Job demands
- Work schedules
- Shift work
- Environmental conditions
- Non-related factors



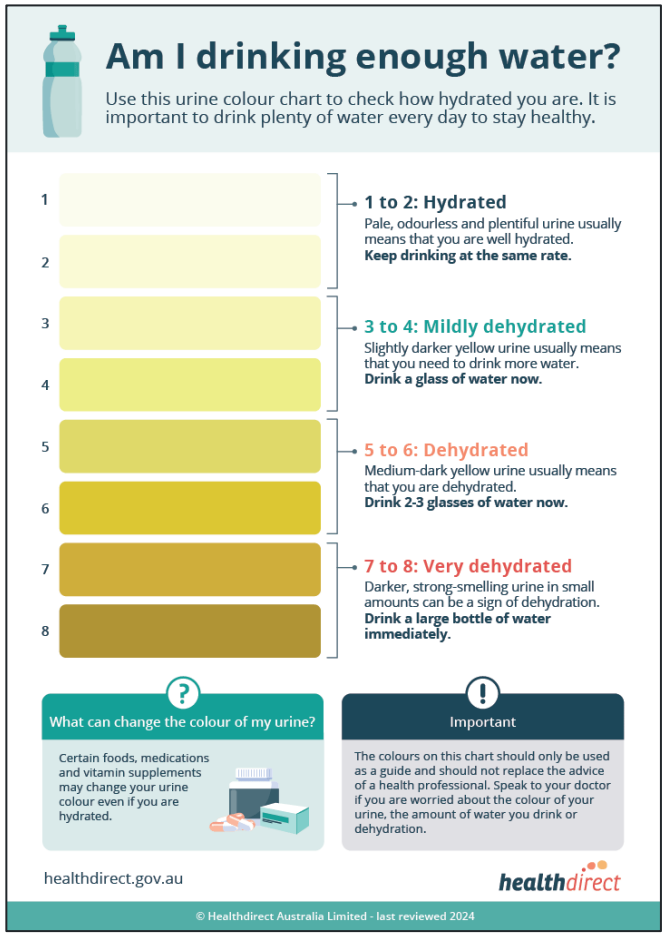
https://www.safeworkaustralia.gov.au/system/files/documents/1702/managing-the-risk-of-fatigue.pdf

Working in extreme temperatures

Heat-related illnesses	Cold-related illnesses
• Heat cramps	• Frostbite
• Heat exhaustion	• Hypothermia
• Heat stroke	

Ultraviolet radiation (UVR)

This radiation from the sun can damage skin permanently and irreversibly. Outdoor workers are at risk of exposure to UVR all year round.



Intoxication by alcohol and other drugs

The objectives of an alcohol and other drug policy need to be clearly stated. They could include:

- maintaining a safe and healthy work environment
- reducing the costs associated with drugs, including alcohol, to the organisation and individuals
- linking action on drug issues with other occupational health and safety initiatives
- providing access to information on drugs use and encourage those with problems to seek assistance.

Alcohol and drug testing should be mandatory after an incident or if you suspect a worker (including contractors) is impaired.

Worker health monitoring

WHS Reg 17 Division 6 – Health monitoring

368 Duty to provide health monitoring
369 Duty to inform of health monitoring
370 Duty to ensure that appropriate health monitoring is provided
371 Duty to ensure health monitoring is supervised by registered medical practitioner with experience
372 Duty to pay costs of health monitoring
373 Information that must be provided to registered medical practitioner
374 Duty to obtain health monitoring report
375 Duty to give health monitoring report to worker
376 Duty to give health monitoring report to regulator
377 Duty to give health monitoring report to relevant persons conducting businesses or undertakings
378 Health monitoring records

Exposure monitoring of workers to the hazards

WHS (MPS) Reg 22 s41 – Ensuring exposure standards for dust and diesel particulate matter and carbon dioxide not exceeded

Potential health hazard	Workplace exposure standards
Inhalable dust (NOS)	WES: 10.0 mg/m^3
Respirable dust (NOS)	WES: 3.0 mg/m^3
Respirable crystalline silica (RCS)*	WES: 0.05 mg/m^3
Diesel particulate matter (DPM)*	WES 0.01mg/m^3

* Exposure monitoring is required if RCS or DPM has been identified as a hazard.

WHS Regs 2017 Schedule 14 Requirements for health monitoring

Hazardous chemicals (common in mines)	Health monitoring requirements
Crystalline silica and coal dust	demographic, medical and occupational history records of personal exposure completion of standardised respiratory questionnaire standardised respiratory function tests, for example forced expiratory volume (FEV), forced vital capacity (FVC), and FEV/FVC chest x-ray full size PA (posterior anterior) view
Lead (inorganic)	demographic, medical and occupational history physical examination biological monitoring
Asbestos	demographic, medical and occupational history records of personal exposure physical examination

Reporting health monitoring results

The following information must be included in the report:

Advice on test results that indicate the worker may have contracted a disease, injury or illness as a result of carrying out work with the chemical.

A recommendation that remedial measures be taken in relation to whether the worker can continue to carry out work with the hazardous chemical that triggered the requirement for health monitoring.

For lead risk work, test results that indicate the worker has reached a blood level at or above the relevant removal level.

Management of health records including first aid

- Kept confidential
- Identified as a record in relation to the worker
- Kept for at least 30 years after the record is made (40 years if exposed to asbestos)
- Not disclosed to another person without written consent

Health control plan summary

- Competent persons involved in risk assessment and health control plan
- Ensure matters in schedule 2 have been considered
- Reviewed every 3 years or after an incident

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Questions?

Thank you